

CLAIMS

1) A splicing device for splicing a first strip (8) fed off a first reel (10), and a second strip (9) fed off a second reel (11); the device being characterized by comprising a first drum (13) rotating about a first axis (13a) and having a first face (19) for selectively retaining and guiding the first strip (8); and a second drum (14) rotating about a second axis (14a) and having a second face (20) for selectively guiding and retaining the second strip (9); the first and second face (19, 20) being so shaped as to form a gap between said first and said second face (19, 20), and to selectively press the first (8) and second (9) strip together as a function of given indexing angles of the first and second drum (13, 14).

2) A device as claimed in Claim 1, characterized in that the first and second face (19, 20) are looped respectively about the first and second axis (13a, 14a), and comprise, respectively, a first and a second curved face (21, 22), which press the first and second strip (8, 9) together at given indexing angles of the first and second drum (13, 14).

3) A device as claimed in Claim 2, characterized in that the first and second face (19, 20) respectively comprise a first and a second connecting face (23, 24); the curved faces (21, 22) being located at a greater distance than the first and second connecting face (23,

24) from the respective first and second axis (13a, 14a).

4) A device as claimed in Claim 3, characterized in that the first and second connecting face (23, 24) are
5 flat and parallel to the first and second axis (13a, 14a) respectively.

5) A device as claimed in Claim 2, characterized in that said first and said second drum (13, 14) have respective suction channels (25, 26), which come out
10 along the first and second face (19, 20) respectively to retain the respective free ends of the first and second strip (8, 9).

6) A device as claimed in Claim 1, characterized by comprising a cutting tool (15) located along an axis (A)
15 of symmetry of the splicing device (5); the axis (A) of symmetry extending between said first and said second drum (13, 14).

7) A device as claimed in Claim 6, characterized in that the cutting tool (15) comprises a fixed portion
20 (31) and a movable assembly (33).

8) A device as claimed in Claim 7, characterized in that the fixed portion (31) comprises an outer face (32), which defines, together with the first drum (13), a portion of a first path (P1) of the first strip (8),
25 and defines, together with the second drum (14), a portion of a second path (P2) of the second strip (9).

9) A device as claimed in Claim 8, characterized in that the movable assembly (33) comprises a first and a

second blade (34, 35), and swings about a third axis (33a) to selectively position the first blade (34) to interfere with the first strip (8) along the first path (P1), and the second blade (35) to interfere with the
5 second strip (9) along the second path (P2).

10) A device as claimed in Claim 7, characterized in that the first and second drum (13, 14) and the movable assembly (33) are driven by a single drive member (36).

10 11) A device as claimed in Claim 10, characterized in that the first and second drum (13, 14) are connected to each other by respective gears (38, 39).

12) A device as claimed in Claim 10, characterized by comprising at least one cam (40, 41) rotating about
15 one of the axes (13a, 14a) of the first and second drum (13, 14) and integral with the first and second drum (13, 14); said movable assembly (33) being integral with at least one tappet (42, 43) to activate the blades (34, 35) as a function of the position of the first and
20 second drum (13; 14).

13) A device as claimed in Claim 1, characterized by comprising a first and a second plate (16, 17) comprising, respectively, a first and a second seating face (27, 28), along which respective suction channels
25 (29, 30) come out to retain the first and second strip (8, 9).

14) A device as claimed in Claim 13, characterized in that the first and second seating face (27, 28) have

ends adjacent to the first and second drum (13, 14) respectively.

15) A device as claimed in Claim 13, characterized in that the first and second seating face (27, 28) face
5 each other.

16) A device as claimed in Claim 13, characterized in that the first and second seating face (27, 28) are concave.

17) A method of splicing a first strip (8) fed off
10 a first reel (10), and a second strip (9) fed off a second reel (11); the second strip (9) having a sticker (45) on its free end; and the method being characterized by guiding the first strip (8) along a first face (19) of a first drum (13), and retaining said free end of the
15 second strip (9) by means of a second face (20) of a second drum (14) and the sticker (45) on the second face (20) of the second drum (14); and rotating the first and the second drum (13, 14) about a first and a second axis (13a, 14a) respectively, to press the first and the
20 second strip (8, 9) and the sticker (45) together and so splice the first and the second strip (8, 9).

18) A method as claimed in Claim 17, characterized in that the first and second face (19, 20) respectively comprise a first and a second curved face (21, 22); and
25 a first and a second connecting face (23, 24), the distance of which from the respective first and second axis (13a, 14a) is less than the distance between the first and second curved face (21, 22) and the respective

first and second axis (13a, 14a).

19) A method as claimed in Claim 18, characterized by indexing said first and said second drum (13, 14) about the first and second axis (13a, 14a) respectively, 5 so as to position the first curved face (21) facing the second connecting face (24) to allow the first strip (8) to run along the first drum (13).

20) A method as claimed in Claim 18, characterized by indexing the first and second drum (13, 14), so that 10 the first curved face (21) faces the second curved face (22) to press the first and second strip (8, 9) and said sticker (45) together.

21) A method as claimed in Claim 20, characterized by stretching the first strip (8) between a fixed 15 portion (32) of a cutting tool (15) and the first drum (13); moving a blade (34) into a position to interfere with said first strip (8); and cutting said first strip (8) between said fixed portion (32) and the first drum (13).

20 22) A method as claimed in Claim 21, characterized by indexing the first and second drum (13, 14) to position the first connecting face (23) facing the second curved face (22), so as to allow the second strip (9) to run on the second curved face (22).